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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,391	01/13/2006	Kohei Nanbu	1254-0302PUS1	8971
	7590 10/29/200 ART KOLASCH & BI	EXAMINER		
PO BOX 747	CH VA 22040 0747	EL SHAMMAA, MARY A		
FALLS CHURCH, VA 22040-0747			ART UNIT	PAPER NUMBER
			2883	
			NOTIFICATION DATE	DELIVERY MODE
			10/29/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)
	10/564,391	NANBU ET AL.
Office Action Summary	Examiner	Art Unit
	MARY A. EL SHAMMAA	2883
The MAILING DATE of this communication appeariod for Reply	ppears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REP WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR of after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by state Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO 1.136(a). In no event, however, may a reply be to d will apply and will expire SIX (6) MONTHS fror ute, cause the application to become ABANDON	N. imely filed in the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
1) ☐ Responsive to communication(s) filed on <u>04</u> 2a) ☐ This action is FINAL . 2b) ☐ Th 3) ☐ Since this application is in condition for allow closed in accordance with the practice under	nis action is non-final. vance except for formal matters, pr	
Disposition of Claims		
4) ☐ Claim(s) 9-23 is/are pending in the application 4a) Of the above claim(s) is/are withdr 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 9-23 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and. Application Papers 9) ☐ The specification is objected to by the Examin	rawn from consideration. /or election requirement.	
10) ☐ The drawing(s) filed on <u>03 December 2008</u> is Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the I	s/are: a)⊠ accepted or b)⊡ object the drawing(s) be held in abeyance. Se ection is required if the drawing(s) is ol	ee 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority application from the International Bure * See the attached detailed Office action for a list 	nts have been received. nts have been received in Applica iority documents have been receiv au (PCT Rule 17.2(a)).	tion No ved in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summar Paper No(s)/Mail [5) Notice of Informal 6) Other:	Date

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DETAILED ACTION

Note: The Examiner for the present application has changed.

Response to Arguments

1. In light of the Pre-brief Appeal Conference Decision mailed August 10, 2009, prosecution has been reopened. However, Applicant's arguments, submitted December 3, 2008 in response to the Non-Final Office Action and submitted in the Pre-brief Appeal Conference Request, filed June 4, 2009, have been considered but are moot in view of the new interpretation of the existing prior art. Thus, this Office Action is Non-Final and meant to replace the Final Rejection mailed April 7, 2009. The claims at issue are those submitted in Amendment of December 3, 2008

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 9 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Merrill et al (US 6,160,663).
- 4. The Examiner respectfully notes independent Claims 9, 16 and 23 are all directed to a backlight unit and recite the same fundamental features of Applicant's invention. Claim 23 is the

most comprehensive of these claims. Thus, for the save of brevity, Claims 9, 16 and 23 will be rejected together using the language of Claim 23.

- 5. Moreover, the Examiner respectfully notes independent Claims 13, 14, 20 and 21 are all directed to the LCD that incorporates the backlight unit of Claims 9, 16 and 23, respectively, and all recite the same fundamental features of Applicant's invention. Claims 14 and 21 are the most comprehensive of these claims. Thus, for the sake of brevity, Claims 13, 14, 20 and 21 will be rejected together using the language of Claim14.
- 6. For Claims 9, 16 and 23, Merrill et al. discloses, in at least figure 1, a backlight unit comprising:

a reflective polarizing sheet (any one of films 106, 110, 112, and 114) having coefficients of expansion different between a first direction and a second direction (see column 7, lines 34 - 37) in a plane (Top View; i.e., the plane perpendicular to the viewing direction of user's eye 130; Figure 1 shows a cross-section of said plane) with the coefficient of linear expansion in the first direction larger than that in the second direction (see column 16, lines 30 – 59; and a second optical sheet (any one of films 106, 110, 112, and 114) that is an optical sheet different from the reflective polarizing sheet and that is disposed adjacently to the reflective polarizing sheet and in a separable manner in a direction normal to the plane thereof (see cross-section in figure 1, second sheet 106 is disposed adjacently to any one of films 110, 112, and 114), wherein, the coefficient of linear expansion of the second optical sheet in the direction corresponding to the first direction is approximated to the coefficient of linear expansion of the second optical sheet in the first direction, wherein the second optical sheet (106) is arranged on the side opposite to light

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sources (108) provided in the backlight unit with respect to the reflective polarizing sheet (110, 112, and 114).

Regarding the linear expansion coefficients of the reflective polarizing sheet and the second optical sheet, Merrill expressly discloses counting warping due to various temperature ranges by adjusting the physical shape and the thermal expansion coefficients of all the films (106, 110, 112, and 114) of the display unit to correspond to the thermal expansion coefficient of the stainless steel frame (see column 7, line 62 – column 8, lines 43). Furthermore, Merrill expressly discloses in the examples beginning in column 21 how the coefficient of linear expansion of the second optical sheet in the direction corresponding to the first direction is approximated to the coefficient of linear expansion of the second optical sheet in the first direction.

- 7. For Claims 13, 14, 20 and 21, Merrill et al. discloses, in at least figure 1 and as described above, the backlight unit described in Claims 9, 16 and 23. However, Merrill et al. further discloses, in at least figure 1, a liquid crystal panel (116) irradiated with light from the backlight unit (102 114), wherein the first optical sheet is a reflective polarizing sheet, and the transmission axis direction of the reflective polarizing sheet and the short side direction of the liquid crystal panel are arranged in parallel (see figures 1, 2A, 3A, and 4A).
- 8. As for Claims 10 12, 15, 17, 18, 19 and 22, Merrill et al. discloses, in at least figure 1, wherein the first optical sheet is a reflective polarizing sheet; the second optical sheet is at least any one of the sheets selected from the group consisting of a prism sheet, a wave sheet, a diffusion sheet, and an ITO sheet; and the first direction is the transmission axis direction of the reflective polarizing sheet; wherein the second optical sheet is formed of at least any one of the

materials selected from the group consisting of a polycarbonate resin, a polystyrene resin, a polyacetal resin, and a nylon 6 resin; and wherein the second optical sheet is arranged on the side opposite to light sources provided in the backlight unit with respect to the first optical sheet.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARY A. EL SHAMMAA whose telephone number is (571)272-2469. The examiner can normally be reached on M-F (8:30am-5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 571.272.2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mary A. El-Shammaa/ Patent Examiner, Art Unit 2883 /Frank G Font/ Supervisory Patent Examiner, Art Unit 2883

October 22, 2009 FGF/mae